

METHOD OF FORMING PARYLENE-DIAPHRAGM PIEZOELECTRIC ACOUSTIC TRANSDUCERS

Abstract of the Disclosure

5 A micromachined acoustic transducer comprising a parylene-diaphragm piezoelectric transducer. The parylene diaphragm has far lower stiffness than the silicon nitride. The method for fabricating the parylene diaphragm acoustic transducer utilizes a prestructured diaphragm layer utilizing silicon nitride which is compatible with high temperature semiconductor process.

10 A silicon nitride layer is patterned and partially removed after forming the parylene diaphragm layer in order to enhance the structural qualities of the parylene diaphragm. The diaphragm may be flat or dome-shaped.